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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,121

07/23/2003

Pedro A. Vazquez

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EXAMINER

DAILEY, THOMAS J

ART UNIT

PAPER NUMBER

2152

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/626,121

Applicant(s)

VAZQUEZ, PEDRO A.

Examiner

Thomas J. Dailey

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-36 are pending in this application.

Claim Objections

2. Claims 1, 13, and 25 are objected because they recite "a plurality of received synchronization request message" (Claim 1: line 6, Claim 13: line 7, Claim 25: line 8). They should recite "messages." Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 13-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As provided on page 21, lines 7-11 of the specification, a computer-usable medium includes transmission media, such as a digital or analog signal. Claims drawn to components involving signals encoded with functional descriptive material do not fall within any of the categories of statutory subject matter as set forth in 35 U.S.C. 101, and are therefore, ineligible for protection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 6-7, 11-12, 18-19, 23-24, 30-31, and 35-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. Claims 6, 18, and 30 recites the limitation "said node meeting identifier" in line 2 of each claim. There is insufficient antecedent basis for this limitation in the claim or its parent claims.
8. Claims 11, 23, and 35 recites the limitation "said synchronization request function" in line 3 of each claim. There is insufficient antecedent basis for this limitation in the claim or its parent claims.
9. Claims 12, 24, and 36 recites the limitation "said synchronization request function" in line 3 of each claim. There is insufficient antecedent basis for this limitation in the claim or its parent claims.
10. Claims 12, 24, and 36 recites the limitation "said calling process" in line 3 of each claim. There is insufficient antecedent basis for this limitation in the claim or its parent claims.

11. Claims 7, 19, and 31, are rejected due to their dependence on the previously rejected claims.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-8, 11-20, 22-32, and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Badovintz et al (US Pat. 5,768,538), hereafter "Badovintz."

14. As to claim 1, 13, and 25, Badovintz discloses a method, a computer usable medium, and a computer system for managing code execution synchronization (Abstract), comprising:
receiving a synchronization request message comprising a first node meeting identifier and a number of participants (column 9, lines 54-57);

maintaining a record of node meeting identifier and number of participants for each of a plurality of received synchronization request message (column 9, lines 57-60);

checking whether the number of records having said first node meeting identifier in comparison to the number of participants in a record having said first node meeting identifier meets a given condition (column 9, lines 57-65, once all of the group members all are verified ("checking" by way of acknowledgement to the group leader the number of acknowledgments expected to the number received) to be on the same sequence number (first node meeting identifier, along with the group leader), the process will be in sync and can be properly executed); and

transmitting a synchronization-attained message when said given condition is met (column 9, lines 43-47, by transmitting the sequence number of the last message seen by all of the nodes, all of the nodes will be synced).

15. As to claims 2, 26, and 14, Badovinatz discloses said given condition comprises that said number of records having said first node meeting identifier is equal to or greater than said number of participants in a record having said first node meeting identifier (column 9, lines 57-65, once all of the group members all are verified ("checking" by way of acknowledgement to the group leader the number of acknowledgments expected to the number received) to be on the same

sequence number (first node meeting identifier, along with the group leader), the process will be in sync and can be properly executed).

16. As to claims 3, 15, and 27, Badovinatx discloses said maintaining comprises creating a table for maintaining records having said first node meeting identifier (column 9, lines 57-65, the comparison of acknowledgements expected to acknowledgments received will inherently have a table to compare the values).
17. As to claims 4, 16, and 28, Badovinatx discloses said maintaining comprises counting said number of records having said first node meeting identifier (column 9, lines 57-65, the comparison of acknowledgements expected to acknowledgments received will inherently count to obtain the total number of records).
18. As to claims 5, 17, and 29, Badovinatx discloses said synchronization request message comprises a participant/non-participant indication, and wherein said maintaining comprises maintaining a record comprising said participant/non-participant indication of a received synchronization request message (column 9, lines 54-57, the multicasted SYNC message participant/non-participant indication is given by who the message is multicasted to and who responds).

19. As to claims 6, 18, and 30, BadovinatZ discloses said maintaining comprises counting said number of records having said same node meeting identifier and said participant indication (column 9, lines 54-65).

20. As to claims 7, 19, and 31, BadovinatZ discloses said synchronization-attained message comprises said number of records having said same node meeting identifier and said participant/non-participant indication (column 9, lines 43-47, as the synchronization attained request is a multicast message to all processing nodes, the multicasted message inherently contains the number of nodes it is transmitting to).

21. As to claims 8, 20, and 32, BadovinatZ discloses said synchronization request message is adapted to be sent from a synchronization request function on request of a calling process, said calling process providing parameters (column 9, lines 48-54).

22. As to claims 10, 22, and 34, BadovinatZ discloses said synchronization request message further comprises an unblocked/blocked indication (column 9, lines 54-65, the blocked indication would be an acknowledgment by a processor group member, blocked in the sense that it will not continue unless more data is received, and the unblocked indication would be an absence of an acknowledgment).

23. As to claims 11, 23, and 35, Badovintz discloses said transmitting further comprises, responsive to a blocked indication, transmitting said synchronization-attained message to said synchronization request function (column 9, lines 54-65, an acknowledgment (blocked indication) from all processor group members is received and the group leader knows the multicast stream has been synced (synchronization attained)).

24. As to claims 12, 24, and 36, Badovintz discloses said transmitting further comprises, on receipt of said synchronization-attained message, transmitting a return of said synchronization request function to said calling process if said synchronization request message comprises a blocked indication (column 9, lines 54-65, the acknowledgments sent by a processor group members with the correct sequence number is an indication that the specific group member is blocked in the sense that it will not continue unless more data is received).

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claims 9, 21, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Badovinatx as applied to claims 8, 20, and 32 above, and further in view of Walter et al (US Pat. 4,914,657), hereafter "Walter."


27. As to claim 9, 21, and 33, Badovinatx discloses the invention substantially with regard to the parent claims 8, 20, and 32, but does not disclose said synchronization request function is adapted to operate at least one error control on at least one of said provided parameters and, responsive to a detected error on said parameter, to transmit an error message to said calling process. Rather, Badovinatx is silent on any specifics with regards to errors and how they are handled.

However, Walter discloses a similar distributed processing system (Abstract) with error control based upon errors in parameters, and transmitting an error message to a calling process (column 2, lines 55-68).


Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Badovinatx and Walter in order to handle errors more effectively and thereby increasing the inventions over ease of use and improving operational efficiency.

Conclusion

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.
29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



TJD
3/28/2007



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SUPERVISORY PATENT EXAMINER